

a mobile station (**MS**) communicating in a communication network and being movable therein,

said communication network comprising

a plurality of base transceiver stations being adapted to perform a communication with said mobile station (**MS**) within its coverage area,

**said method comprising the steps of**

processing (**S3**) location information related to the mobile station (**MS**) by comparing it with position information related to the base transceiver stations (**BTS 1A, BTS 1B, BTS 2, BTS 3**),

deciding (**S4**) on the basis of the result of said processing (**S3**), whether a first handover condition is fulfilled, and checking subscriber specifications concerning another measurement (**S5**) for a handover,

designating (**S9**) a next base transceiver station in said communication network, to which the communication with said mobile station (**MS**) is to be directed from a current base transceiver station, when the first handover condition is fulfilled,

triggering a handover (**S10**) of the communication connection of the mobile station (**MS**) from the current base transceiver station to the next base transceiver station designated in said designating step (**S10**), and performing (**S11**) the handover.

28. (New) A method according to claim 27, wherein  
in said processing step (**S3**) at least one additional parameter is processed together with said location information related to the mobile station (**MS**) and position information related to the base transceiver stations (**BTS 1A, BTS 1B, BTS 2, BTS 3**).
29. (New) A method according to claim 28, wherein  
said additional parameter is based on a signal quality.
30. (New) A method according to claim 27, further comprising a location information obtaining step (**S2**) comprising  
a step of determining said location information related to the mobile station (**MS**) and  
a step of transmitting said determined location information to a respective network device (**BSC, MSC**) adapted to perform said processing step (**S3**).

31. (New) A method according to claim 30, wherein said step of determining said location information related to the mobile station (**MS**) is executed in the mobile station (**MS**).

32. (New) A method according to claim 30, wherein said step of determining said location information related to the mobile station (**MS**) is executed in a network element on the network infrastructure side.

33. (New) A method according to claim 30, wherein said step of determining said location information related to the mobile station (**MS**) is based on at least one of the following methods:

- locating by a global positioning system;
- locating by a time of arrival;
- locating by an observed time difference.

34. (New) A method according to claim 30, wherein said location information obtaining step (**S2**) is executed periodically.

35. (New) A method according to claim 30, wherein said location obtaining step (S2) is executed upon predetermined occasions.

36. (New) A method according to claim 35, wherein said predetermined occasion is a attachment procedure of the mobile station (**MS**) to the communication network.

37. (New) A method according to claim 27, wherein,  
if the first handover condition is not fulfilled, on the basis of the checking of the subscriber specifications,

the method **further comprises the steps of**  
checking (**S5**), whether a further measurement is to be performed,  
selecting (**S6**) a type of further measurement, if a measurement is to be  
performed,  
executing (**S7**) the measurement selected in said selecting step (**S6**),

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verifying (**S8**), whether a measurement result represents a second handover condition, and

if the result of said verifying step (**S8**) represents the second handover condition, initiating execution of said target cell designation step (**S9**) for performing the handover (**S10, S11**).

38. (New) A method according to claim 27, wherein the coverage area of the base transceiver station designated in said designating step (**S9**) and to which the communication connection is to be directed (**S10**) is a coverage area adjacent to the coverage area of the current base transceiver station.

39. (New) A method according to claim 27, wherein the coverage area of the base transceiver station designated in said designating step (**S9**) and to which the communication connection is to be directed (**S10**) is a coverage area not adjacent to the coverage area of the current base transceiver station.

40. (New) A method according to claim 39, wherein the coverage area not adjacent to the coverage area of the current base transceiver station to which the communication connection is to be directed (**S10**) is known to the communication network.

41. (New) A method according to claim 40, wherein the base transceiver station (**BTS**) with the coverage area not adjacent to the coverage area of the current base transceiver station, to which the communication connection is to be directed (**S10**), is a predetermined base transceiver station (**BTS**).

42. (New) A method according to claim 41, wherein the position information of the predetermined base transceiver station (**BTS**) is stored in a subscriber identity module (**SIM**) or in the mobile station (**MS**).

43. (New) A device for controlling a handover procedure for a mobile station (**MS**) communicating in a communication network and being movable therein, said communication network comprising

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a plurality of base transceiver stations being adapted to perform a communication with said mobile station (**MS**) within its coverage area,  
**said device comprising**

a processing means (**2**) for processing location information related to said mobile station (**MS**) by comparing it with position information related to base transceiver stations (**BTS**), and for deciding on the basis of the result of said processing, whether a first handover condition is fulfilled, and for checking subscriber specifications concerning another measurement for a handover,

a designating means (**4**) for designating a next base transceiver station in said communication network, to which the communication with said mobile station (**MS**) is to be switched from a current base transceiver station, when the first handover condition is fulfilled, and

a triggering means (**5**) for triggering a handover of the communication connection of the mobile station (**MS**) from the current base transceiver station to the next base transceiver station designated by said designating means (**4**).

44. (New) A device according to claim 43, wherein  
in said processing means (**2**) at least one additional parameter is processed together with said location information related to the mobile station (**MS**) and position information related to the base transceiver stations (**BTS 1A, BTS 1B, BTS 2, BTS 3**).
45. (New) A device according to claim 44, wherein  
said additional parameter is based on a signal quality.
46. (New) A device according to claim 43, further comprising means (**1**)  
for determining location information related to the mobile station (**MS**) and  
for transmitting said determined location information to a respective network device (**BSC, MSC**) performing said processing.
47. (New) A device according to claim 46, further comprising a memory means (**3**)  
for memorizing location information related to the mobile station (**MS**) and position information related to the base transceiver stations (**BTS**),

48. (New) A device according to claim 46, wherein said means (1) for determining location information related to the mobile station (**MS**) and for transmitting said determined location information to a respective network device (**BSC, MSC**) performing said processing are located in the mobile station (**MS**).

49. (New) A device according to claim 46, wherein said means (1) for determining location information related to the mobile station (**MS**) and for transmitting said determined location information to a respective network device (**BSC, MSC**) performing said processing are located in a network element on the network infrastructure side.

50. (New) A device according to claim 46, wherein said means (1) for determining the location information related to the mobile station (**MS**) is adapted to perform said determination according to at least one of the following methods:

- locating by a global positioning system;
- locating by a time of arrival;
- locating by an observed time difference.

51. (New) A device according to claim 43, further comprising a measurement means (6) being responsive to the subscriber specifications and adapted to check, whether a further measurement is to be performed, select a type of further measurement, if a measurement is to be performed, execute the selected measurement, verify, whether a measurement result represents a second handover condition, and if said second handover condition is verified, forwarding the measurement result to said handover condition processing means (2) for performing the handover.

102701-635550  
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